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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of : Confirmation No. 4336
Ian E. Kibblewhite, et al. : Group Art Unit 2855
Application No. 10/528,515 : Examiner: Jonathan M. Dunlap
Filing Date: October 26, 2005 : (571) 270-1335
For a Patent for :
THREAD FORMING FASTENERS :
FOR ULTRASONIC LOAD :
MEASUREMENT AND CONTROL :

SUPPLEMENT TO DECLARATION OF IAN E. KIBBLEWHITE

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Ian E. Kibblewhite, hereby declare that:

1. I am one of the two joint inventors named in the
above-referenced U.S. Patent Application No. 10/528,515.

2. An Office Action issued in connection with the
above-identified U.S. Patent Application No. 10/528,515, on May
8, 2007, formulated various rejections of claims under 35 U.S.C.

§103(a) which were based, primarily, on a proposed combination of U.S. Patent No. 5,242,253 (Fulmer) and U.S. Patent No. 5,131,276 (Kibblewhite).

3. On November 8, 2007, a "Reply to Office Action Mailed May 8, 2007" was filed which enclosed a "Declaration of Ian E. Kibblewhite". The submitted Declaration presented evidence explaining why the person of ordinary skill in the art at the time the present invention was made would not have known to, or even considered coupling the ultrasonic transducer of Kibblewhite with the thread-forming fastener of Fulmer, could not have predicted that a thread-forming fastener would be a suitable structural element for implementation as the load indicating member disclosed by Kibblewhite, and would not have predicted that the ultrasonic transducer of Kibblewhite could be effectively coupled with the thread-forming fastener of Fulmer. The "Declaration of Ian E. Kibblewhite" which was submitted in this matter on November 8, 2007, is incorporated by reference as if fully set forth in the present Declaration.

4. Nevertheless, a further Office Action issued in this matter on December 5, 2007, which re-stated all of the formulated rejections presented in the Office Action of May 8, 2007, and which addressed the evidence presented in the submitted "Declaration of Ian E. Kibblewhite".

5. At the bottom of page 16 of the Office Action of December 5, 2007, in the last paragraph, the "Examiner takes the position that a person of ordinary skill in the art would have recognized that the results of the combination were predictable because a person of ordinary skill would have seen a 5%-20% error in measurements..." and "[since] the invention is not concerned with correcting, identifying or monitoring these errors, a person of ordinary skill would find that the combination, without further modification would predictably be inaccurate".

6. From Kibblewhite, the person of ordinary skill in the art at the time the present invention was made would have known that "ultrasonic tension measurement is recognized as a highly accurate laboratory tightening method for calibration, application testing and for tightening very critical joints" (Col. 1, lines 57 to 61; emphasis added). Consequently, the person of ordinary skill in the art at the time the present invention was made would have known that the claimed ultrasonic transducers were intended for use in performing highly accurate tension measurements in critical joint applications.

7. The person of ordinary skill in the art at the time the present invention was made would also have known that for critical joint applications, errors in measurement of less than 5%, and typically from 1% to 3%, must reliably be achieved, and

that for applications where errors in measurement of less than 5% must be guaranteed, an ultrasonic transducer must be used.

8. For all other applications, which would include non-critical applications for which errors in measurement of less than 5% could not be guaranteed, the person of ordinary skill in the art at the time the present invention was made would have used traditional torque-angle techniques for the tightening operations to be performed. Torque-angle techniques can typically guarantee errors in measurement of from 10% to 20%.

9. Consequently, for applications in which errors in measurement of less than 5% must be guaranteed, the person of ordinary skill in the art at the time the present invention was made would have known to use ultrasonic load measurement techniques for such tightening operations. Because there is, in practice, no tightening technique which can guarantee errors in measurement of from 5% to 10%, the person of ordinary skill in the art at the time the present invention was made would have known to use traditional torque-angle techniques for tightening operations in which errors in measurement of less than 5% could not be guaranteed.

10. The person of ordinary skill in the art at the time the present invention was made would have known that

ultrasonic load measurement techniques were not useful for applications in which errors in measurement of less than 5% could not be guaranteed, and that using ultrasonic load measurement techniques in such applications would be meaningless.

11. Contrary to the position taken in the last paragraph at the bottom of page 16 of the Office Action of December 5, 2007, the person of ordinary skill in the art at the time the present invention was made, faced with a 5% to 20% error in measurement, would not have even considered a combination of the ultrasonic transducer of Kibblewhite with the thread-forming fastener of Fulmer because ultrasonic transducers were at that time known to be useful only for applications in which errors in measurement of less than 5% could be guaranteed, and it was at that time known that errors in measurement of less than 5% could not be guaranteed for thread-forming fasteners.

12. The Examiner is correct in stating that for applications in which errors in measurement of less than 5% could not be guaranteed, a combination of the ultrasonic transducer of Kibblewhite with the thread-forming fastener of Fulmer "without further modification would predictably be inaccurate". In such case, however, the person of ordinary skill in the art at the time the present invention was made would not have known to produce the claimed combination of the

ultrasonic transducer of Kibblewhite and the thread-forming fastener of Fulmer, and would have expected that the claimed combination of the ultrasonic transducer of Kibblewhite and the thread-forming fastener of Fulmer would be inoperative, and therefore unpredictable. Moreover, the person of ordinary skill in the art at the time the present invention was made would have known that the claimed ultrasonic transducers are "concerned with correcting, identifying or monitoring... [errors in measurement]" and, because of this, the claimed combination of an ultrasonic transducer and a thread-forming fastener would not have occurred to the person of ordinary skill in the art at the time the present invention was made.

13. Consequently, the person of ordinary skill in the art at the time the present invention was made would not have known to, or even considered coupling the ultrasonic transducer of Kibblewhite with the thread-forming fastener of Fulmer because the expected inaccuracies in the load measurements made during run-down of the thread-forming fastener would not have been considered appropriate for the use of an ultrasonic transducer. Moreover, the person of ordinary skill in the art at the time the present invention was made would have expected that thread-forming fasteners were not "suitable" as a load indicating member useful for critical joint applications. Furthermore, and under such circumstances, the person of ordinary skill in the art at the

time the present invention was made could not have predicted that a thread-forming fastener would be a suitable structural element for implementation as the load indicating member disclosed by Kibblewhite, and would not have predicted that the ultrasonic transducer of Kibblewhite could be effectively coupled with the thread-forming fastener of Fulmer.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 4/3/08

BY: Ian E. Kibblewhite
Ian E. KIBBLEWHITE